Replaced

THE FOLLOWING ARE THE ENGLISH TRANSLATION OF ANNEXES TO THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT (SECOND ARTICLE 34):

Amended Sheets (Pages 23-26)

CLAIMS

1. (Amended) A method for measuring vibration frequency of a multi-cantilever in which natural vibrations of a plurality of cantilevers having different natural frequencies are successively excited by modulation excitation in order to measure the vibrations with a laser Doppler meter and control laser spot position and frequency scanning in accordance with frequency gradients of the plurality of cantilevers, so that a material is detected with the plurality of cantilevers.

2. (Amended) A method for measuring vibration frequency of a multi-cantilever in which natural vibrations of a plurality of cantilevers having different natural frequencies are successively excited by modulation excitation in order to measure the vibrations with a homodyne interferometer and control laser spot position and frequency scanning in accordance with frequency gradients of the plurality of cantilevers, so that a material is detected with the plurality of cantilevers.

3. The method for measuring vibration frequency of a multi-cantilever according to either Claim 1 or Claim 2, wherein the modulation excitation is a modulation optical

excitation.

4. The method for measuring vibration frequency of a multi-cantilever according to either Claim 1 or Claim 2, wherein the modulation excitation is a modulation electrical excitation.

5. (Amended) A method for measuring vibration frequency of a multi-cantilever in which a plurality of cantilevers being implanted radially at an island-shaped base and having different natural frequencies are illuminated with a common laser excitation spot so as to simultaneously excite natural vibrations of the plurality of cantilevers by constant light excitation in order to measure the vibrations.

6. (Amended) A method for measuring vibration frequency of a multi-cantilever in which a plurality of cantilevers being implanted towards an inner side of a spiral base and having different natural frequencies are illuminated with a common laser excitation spot so as to simultaneously excite natural vibrations of the plurality of cantilevers by constant light excitation in order to measure the vibrations.

7. (Amended) A device for measuring vibration frequency of a multi-cantilever comprising:

(a) a plurality of cantilevers being implanted radially at an island-shaped base and having different natural frequencies;

(b) means for simultaneously exciting natural vibrations of the cantilevers by constant light excitation; and

(c) a laser Doppler meter for measuring the vibrations.

8. (Amended) A device for measuring vibration frequency of a multi-cantilever comprising:

(a) a plurality of cantilevers being implanted radially at an island-shaped base and having different natural frequencies;

(b) means for simultaneously exciting natural vibrations of the cantilevers by constant light excitation; and

(c) a homodyne interferometer for measuring the vibrations.

9. (Amended) A device for measuring vibration frequency of a multi-cantilever comprising:

(a) a plurality of cantilevers being implanted towards an inner side of a spiral base and having different natural

frequencies;

(b) means for simultaneously exciting natural vibrations of the cantilevers by constant light excitation; and

(c) a laser Doppler meter for measuring the vibrations.

10. (Amended) A device for measuring vibration frequency of a multi-cantilever comprising:

(a) a plurality of cantilevers being implanted towards an inner side of a spiral base and having different natural frequencies;

(b) means for simultaneously exciting natural vibrations of the cantilevers by constant light excitation; and

(c) a homodyne interferometer for measuring the vibrations.

11. (Amended) The method for measuring vibration frequency of a multi-cantilever according to either Claim 1 or 2, wherein the plurality of cantilevers are radial cantilevers implanted on a substrate.

12. The device for measuring vibration frequency of a multi-cantilever according to any one of Claims 7, 8, 9, and 10, wherein the cantilevers are disposed radially in a

cluster so that the cantilevers are capable of being irradiated with a common excitation spot.

13. A scanning probe microscope using the device for measuring vibration frequency of a multi-cantilever according to any one of Claims 7, 8, 9, and 10 for self-exciting the natural frequencies of the cantilevers in order to detect an interaction between a specimen and a probe at an end of each cantilever as a change in a self-excitation vibration frequency, a self-excitation vibration amplitude, or a self-excitation vibration phase.

14. A mass/material detector using the device for measuring vibration frequency of a multi-cantilever according to any one of Claims 7, 8, 9, and 10 for self-exciting the natural frequencies of the cantilevers in order to detect a change in a mass adhered to a probe at an end of each cantilever as a change in a self-excitation vibration frequency, a self-excitation vibration amplitude, or a self-excitation vibration phase.